

AMENDMENTS TO THE CLAIMS

1-19 (Cancelled)

- 5 20. (Currently amended) A microdisplay pixel cell device, the device comprising:
- a semiconductor substrate defined with a plurality of active areas;
 - at least one gate, the gate covering a portion of the active area;
 - at least one source/ and at least one drain(S/D), the source/ and the
10 drain being in the active area not covered by the gate;
 - a first dielectric layer, the first dielectric layer covering the gate and the source/ and the drain, the first dielectric layer comprising at least one row select contact plug to electrically connect to the gate;
 - at least one row select line, the row select line being atop the first
15 dielectric layer, the row select line being electrically connected to the gate through the row select contact plug;
 - a second dielectric layer, the second dielectric layer being atop the first dielectric layer and covering the row select line;
 - at least one pixel cap top plate, the pixel cap top plate being atop the
20 second dielectric layer;
 - at least one first contact plug, the first contact plug being in the first dielectric layer and the second dielectric layer for electrically connecting the source and the top plate;
 - at least one capacitor dielectric layer, the capacitor dielectric layer
25 being atop the surface of the top plate; and
 - at least one pixel cap bottom plate, the pixel cap bottom plate being atop the second dielectric layer and covering the top plate and the capacitor dielectric layer.
- 30 21. (Original) The device of claim 20 wherein the gate comprises a gate oxide layer, a polysilicon layer or a metal silicide layer.

22. (cancelled)

23. (Original) The device of claim 20 wherein at least one second
contact plug is comprised in the first dielectric layer and the second
5 dielectric layer for electrically connecting the drain to a video data line.

24. (Original) The device of claim 20 wherein the row select line is
composed of a metal and is used as a scan line of the microdisplay.

10 25. (Original) The device of claim 20 wherein both the bottom plate
and the top plate are composed of a metal.

26. (Original) The device of claim 25 wherein both the bottom plate
and the top plate are composed of titanium (Ti), titanium nitride (TiN),
15 aluminum (Al), copper (Cu) or an alloy of above-mentioned materials.

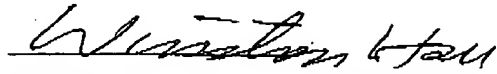
27. (Original) The device of claim 20 wherein the pixel cell comprises
two gates, two common drains, four sources, four top plates and one
bottom plate stacking in sequence from bottom to top.
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28. (Original) The device of claim 20 wherein the microdisplay is a
reflective liquid crystal on silicon (LCOS) display.

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Sincerely yours,



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10 (Please contact me by e-mail if you need a telephone
communication and I will return your call promptly.)